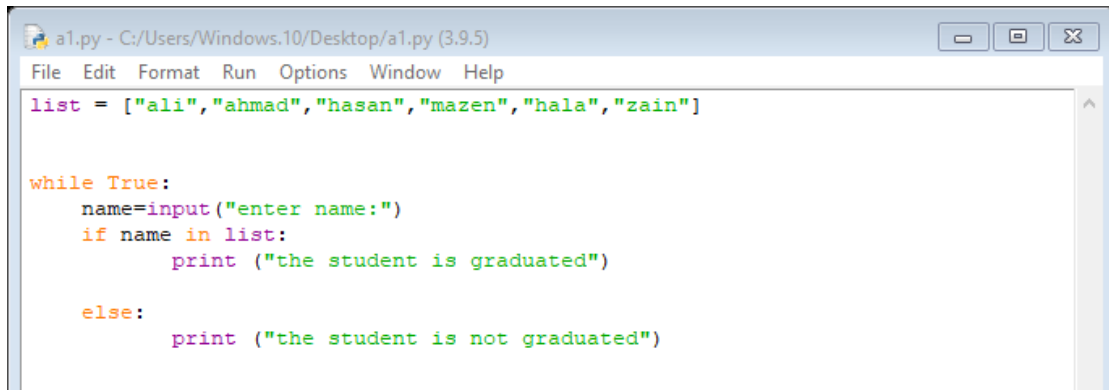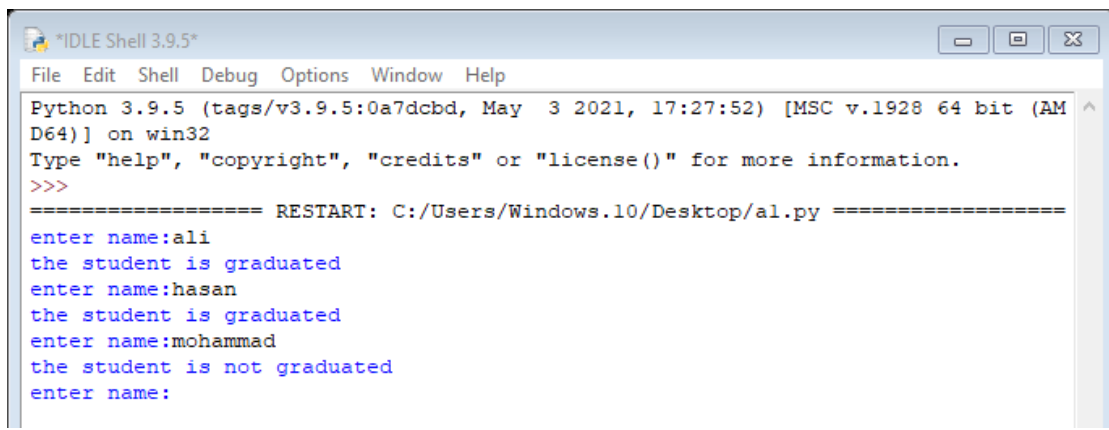**الاسم: أيوب إبراهيم ونوس**

الرقم: ١٩٧١

الوظيفة الأولى---برمجة شبكات

a)-

```
a1.py - C:/Users/Windows.10/Desktop/a1.py (3.9.5)
File  Edit  Format  Run  Options  Window  Help

list = ["ali","ahmad","hasan","mazen","hala","zain"]


while True:
    name=input("enter name:")
    if name in list:
            print ("the student is graduated")

    else:
            print ("the student is not graduated")
```
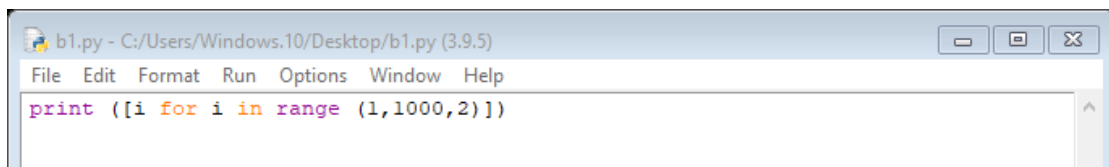
```
*IDLE Shell 3.9.5*
File  Edit  Shell  Debug  Options  Window  Help

Python 3.9.5 (tags/v3.9.5:0a7dcbd, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================= RESTART: C:/Users/Windows.10/Desktop/a1.py =================
enter name:ali
the student is graduated
enter name:hasan
the student is graduated
enter name:mohammad
the student is not graduated
enter name:
```

b)-

```
b1.py - C:/Users/Windows.10/Desktop/b1.py (3.9.5)
File  Edit  Format  Run  Options  Window  Help

print ([i for i in range (1,1000,2)])
```

```
IDLE Shell 3.9.5                                                    □ ▣ ⊠
File  Edit  Shell  Debug  Options  Window  Help
Python 3.9.5 (tags/v3.9.5:0a7dcbd, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================== RESTART: C:/Users/Windows.10/Desktop/b1.py ==================
[1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41,
43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81,
83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117,
 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149,
 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181,
 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213,
 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245,
 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277,
 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309,
 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341,
 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373,
 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405,
 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437,
 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469,
 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501,
 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533,
 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565,
 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597,
 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629,
 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661,
 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693,
 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725,
 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757,
 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789,
 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 813, 815, 817, 819, 821,
 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853,
 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885,
 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917,
 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949,
 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981,
 983, 985, 987, 989, 991, 993, 995, 997, 999]
>>>
```

C)-

```
c1.py - C:/Users/Windows.10/Desktop/c1.py (3.9.5)                  □ ▣ ⊠
File  Edit  Format  Run  Options  Window  Help
list=["Network","Math","Programing","Physics","Music"]
for i in range(len(list)):
    if list[i][0]=="P":
        print(list[i])
```

```
IDLE Shell 3.9.5                                                    □ ▣ ⊠
File  Edit  Shell  Debug  Options  Window  Help
Python 3.9.5 (tags/v3.9.5:0a7dcbd, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================== RESTART: C:/Users/Windows.10/Desktop/c1.py ==================
Programing
Physics
>>>
```

```
d1.py - C:/Users/Windows.10/Desktop/d1.py (3.9.5)
File  Edit  Format  Run  Options  Window  Help
d=dict()
for x in range (1,11):
    d[x]=x**2
print(d)
```

```
IDLE Shell 3.9.5
File  Edit  Shell  Debug  Options  Window  Help
Python 3.9.5 (tags/v3.9.5:0a7dcbd, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================== RESTART: C:/Users/Windows.10/Desktop/d1.py ==================
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100}
>>>
```

السؤال الثانى:

```
السؤال الثاني.py - C:/Users/Windows.10/Desktop/السؤال الثاني.py (3.9.5)
File  Edit  Format  Run  Options  Window  Help
binary=[]
num=int(input("please enter decimal value:"))
x=num
while x!=0:
    remain=x%2
    binary.append(remain)
    x=x//2
    binary.reverse()
    n=""
    for i in binary:
        n=n+str(i)
print(n)
```

```
IDLE Shell 3.9.5
File  Edit  Shell  Debug  Options  Window  Help
Python 3.9.5 (tags/v3.9.5:0a7dcbd, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: C:/Users/Windows.10/Desktop/السؤال الثاني.py =============
please enter decimal value:128
10000000
>>>
============= RESTART: C:/Users/Windows.10/Desktop/السؤال الثاني.py =============
please enter decimal value:15
1111
>>>
```

السؤال الثالث:

```python
import json
def function():
    name=["ayoub"]
    degrees=[]
    for i in range(1):
        degree=0
        name_student=input("enter student name:"+str(name[i]))
        qes1=input("what is your name?")
        qes2=input("how old are you?")
        qes3=input("what is your favourit sport?")
        qes4=input("what is your favourit food?")
        if qes1=="ayoub":
            degree=degree+5
        else:
            degree=degree+0
        if qes2=="25":
            degree=degree+5
        else:
            degree=degree+0
        if qes3=="football":
            degree=degree+5
        else:
            degree=degree+0
        if qes4=="fish":
            degree=degree+5
        else:
            degree=degree+0
        print("your degree is: " +str (degree))
        degrees.append (degree)
    d={}
    for i in range (1):
        N=name[i]
        M=degrees[i]
        d[N]={"name":N,"degree":M}
        i+=1
    folder=json.dumps(d)
    with open ("ayoub.json","w") as x:
        x.write(folder)
    with open ("ayoub.json","r") as x:
        result=json.loads(x.read())
    print (result)
```

IDLE Shell 3.9.5

File Edit Shell Debug Options Window Help

```
Python 3.9.5 (tags/v3.9.5:0a7dcbd, May  3 2021, 17:27:52) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: C:\Users\Windows.10\Desktop\الـثالث الـسؤال.py =============
>>> function()
enter student name:ayoub
what is your name?ayoub
how old are you?25
what is your favourit sport?
what is your favourit food?fish
your degree is: 15
{'ayoub': {'name': 'ayoub', 'degree': 15}}
>>>
```

ayoub - Notepad

File Edit Format View Help

{"ayoub": {"name": "ayoub", "degree": 15}}